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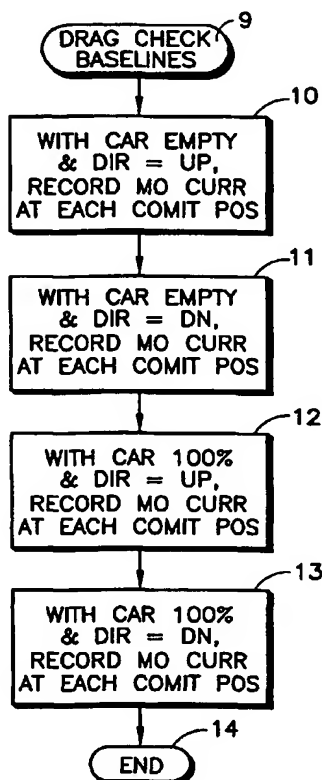
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[Continued on next page]

(54) Title: DETECTING ELEVATOR BRAKE AND OTHER DRAGGING BY MONITORING MOTOR CURRENT



(57) Abstract: Elevator brake or other drag is checked by establishing (10-13) baseline motor currents at plural determined positions as the car is moved up and down both empty and with full load. In a normal run (21), the load is recorded (22) and the motor current required to drive the load at rated speed at the next determined position is both predicted (28) and measured. If the difference between the predicted and actual current exceeds a tolerance (33, 34), the car stops at the next floor (35), the system is shut down (39) and a message generated (40). When the brake is in proper operating condition, baseline motor current required to move a car with the brake engaged is recorded. Thereafter, a high fraction (such as 90%) of baseline motor current is applied to attempt to move the car. If the car moves, the system is shut down (101) and a message generated (102).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B66B 1/32
US CL : 187/288,276;188/1.11E

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 187/288,276;188/1.11E

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
BRS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,765,664 A (HERKEL et al) 16 June 1998 (16.06.1998) See entire document	1-9
A	US 5,241,255 A (OSHIMA et al) 31 August 1993 (31.08.1993)	
A	US 4,982,815 A (ARABORI et al) 8 January 1991 (08.01.1991)	
A	US 4,928,021 A (YONEMOTO) 22 May 1990 (22.05.1990)	
A	US 4,898,263 (MANSKE et al) 6 February 1990 (06.02.1990)	
A	US 6,442,350 B1 (ERKER) 23 July 2002 (23.07.2002)	

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☐ See patent family annex.

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